Call for cooperation: network of biometric testing laboratories

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The idea of testing labs network - how it evolved

- **Biometrics projects**
  - Evident need for cooperation
- **Databases**
  - Collection problematic and costly
  - Scattered and heterogeneous data (e.g. different race)
- **Enlarging number of teams and testing activities**
  - Hard to follow the knowledge
  - Different testing protocols
- **Security concerns**
  - Large scale of new deployments
  - Inadequate harmonization
  - Need to increase society awareness – who is currently the best authority to do it?

Common interest

- **Who will suffer the consequences of frauds in biometrics?**
  - Failure of biometrics X influences entire biometric business (even vendors of biometrics Y)
- **Knowledge exchange in the underground world is much faster than in academia or industry**
- **It seems there is no place where the information about biometric frauds, attacks and vulnerabilities is systematically collected and published**
  - Purpose: identification of trends, threats, statistics etc.
- **There is no contradiction between cooperation and competitiveness among the players**
- **Economical aspects**
  - Reducing the costs of biometric systems deployment due to recommendations of trusted testing laboratories
  - Weaknesses disclosure first of all to vendors (and to the public – rather as the last step)

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Network security analogy (CERT)

- **The wake-up call: late 1980s, first global worm (Morris)**
  - Sudden awareness of a strong need for global cooperation
- **Over the years IT security specialists worked out the cooperation models of CERT teams**
  - Reactive services (alerts and warnings, vulnerabilities analysis and handling …)
  - Proactive services (technology watch, security audits security tools …)
  - Security quality management (risk analysis, security consulting, product evaluation and certification …)

For further details on CERTs cooperation see: „CERT Cooperation and its further facilitation by relevant stakeholders", ENISA Deliverable WP2006/5.1 (CERT-D3), available at: http://www.enisa.europa.eu/act/cert/background/coop

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Models of cooperation and trust

- **Centralized authority is not a good idea**
  - This idea failed e.g. in CERT model
- **Bilateral team-team cooperation**
- **Association of teams**
- **Cooperation between associations**
- **Sector cooperation**
  - Government, industry, academic, region, …
- **Legal aspects**
  - NDA, MOU, contract, ToR …
- **Trust models**
  - Bilateral and multilateral agreements, sponsorship
  - Accreditation (yet has some limitations)
    - procedures take time
    - requirement of independency
    - legal aspects (different in each country)

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Things to think over

- Need for confidence
- Financial aspects
- Assurance of quality (the base of trust)
- Differences in legal systems
- Organisational and political support

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Example: Polish Platform for Secure Implementation of Biometrics

- **Areas of cooperation**
  - Development of testing methodologies (including legal aspects) at three testing levels (lab, real and operational scenarios)
  - Information, knowledge and expertise exchange
    - Tools, best practices
  - Resources exchange
    - Common multimodal database collection, including data for template ageing assessment
- **Consortium**
  - Warsaw University of Technology (coordinator)
  - Research and Academic Computer Network NASK
  - Polish Security Printing Works PWPW S.A.
  - Department of Criminalistics, Warsaw University
- **Project co-sponsored by the Polish Ministry of Science and Higher Education within Country's Defense Programme**

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SENSE OF TELECOMMUNICATION

What is your opinion ?

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